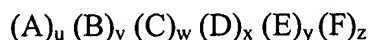


Listing of Claims

Claim 1 (currently amended): A compound comprising a backbone having a formula:



where A is derived from one or more ~~hydroxyl alkyl (meth)acrylate~~ hydroxyalkyl (meth)acrylates, B is derived from one or more hydroxy polyalkyleneoxide (meth)acrylates, C is derived from one or more alkyl(meth)acrylates, D is derived from one or more (meth)acrylic acids, E is derived from one or more vinyl aromatic monomers, nitrogen containing compounds or thio-analogs of a nitrogen containing compounds, silicon containing monomers, substituted ethylene monomers, or cyclic olefin monomers, and F is derived from one or more hydroxy poly opened-ring lactone polyalkylene oxide (meth)acrylates, where u, v, w, x, y and z are weight percentages of the monomers in the backbone, where u is 0 to 30%, v is 0 to 30%, w is 5 to 70%, x is 5 to 40%, y is 0 to 20% and z is 0 to 30% with the proviso that at least one ~~of~~ of u, v or z is greater than 0, and at least one ~~of~~ of A, B, C, D, E and F has at least one pendent functional group, the pendent functional group is derived from diisocyanates, triisocyanates, or polyisocyanates.

Claim 2 (canceled)

Claim 3 (currently amended): The compound ~~to of~~ of claim 2 ~~18~~, wherein the hydroxyalkyl (meth)acrylate monomer is 2-hydroxyalkyl (meth)acrylate, 2-hydroxyethyl acrylate, 2-hydroxypropyl methacrylate, 1-methyl-2-hydroxyethyl methacrylate, 2-hydroxypropyl acrylate, 1-methyl-2-hydroxyethyl acrylate, 2-hydroxybutyl methacrylate, or 2-hydroxybutyl acrylate.

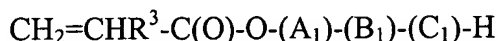
Claim 4 (original): The compound of claim 3, wherein the hydroxyalkyl (meth)acrylates have a degree of polymerization of from 1 to 20.

Claim 5 (original): The compound of claim 1, wherein the alkyl group has from 1 to 24 carbon atoms.

Claim 6 (currently amended): The compound of claim 1, wherein ~~the pendent functional group is derived from a compound that reacts with a hydroxyl group or amine group on the backbone of the copolymer to form a bond~~, the pendent functional group comprises at least one α,β -ethylenically or acetylenically unsaturated moiety.

Claim 7 (canceled)

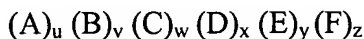
Claim 8 (currently amended): The compound of claim 7 1, wherein the diisocyanates, triisocyanates or polyisocyanates are bonded through a free isocyanate group to a free hydroxyl group of a compound having a formula:



wherein R^3 is hydrogen or methyl, (A_1) , (B_1) and (C_1) are in any order, (A_1) is a chain formed of from 1 to 40 alkoxyate monomers, aromatic-substituted alkoxyate monomers having from 1 to 20 carbon atoms, or mixtures thereof, (B_1) is either absent or is a chain formed of from 1 to 40 alkoxyate monomers, or aromatic-substituted alkoxyate monomers having from 1 to 20 carbon atoms, or mixtures thereof, and the monomer composition of (B_1) being different than the monomer composition of (A_1) , and (C_1) is a chain formed of from 1 to 40 open-ring lactone monomers having from 2 to 21 carbon atoms.

Claim 9 (currently amended): A photopolymerizable composition comprising:

a) a polymeric binder having a formula:



where A is derived from one or more hydroxyl substituted alkyl (meth)acrylates, B is derived from one or more hydroxy polyalkyleneoxide (meth)acrylates, C is derived from one or more alkyl (meth)acrylates, D is derived from one or more (meth)acrylic acids, E is derived from one or more vinyl aromatic monomers, nitrogen containing compounds or thio-analogs of a nitrogen containing compounds, silicon containing monomers, substituted ethylene monomers, or cyclic olefin monomers, and F is derived from one or more hydroxy poly opened-ring lactone polyalkylene oxide (meth)acrylates where u, v, w, x, y and z are weight percentages of the monomers in the backbone, where u is 0 to 30%, v is 0 to 30%, w is 5 to 70%, x is 5 to 40%, y is 0 to 20% and z is 0 to 30% with the proviso that at least one of u, v or z is greater than 0, and at least one of A, B, C, D, E and F has at least one pendent functional group, the pendent functional group is derived from diisocyanates, triisocyanates, or polyisocyanates; and

b) one or more photoinitiators.

Claim 10 (original): The photopolymerizable composition of claim 9, wherein the hydroxyl substituted alkyl (meth)acrylates are branched or unbranched hydroxy(C₂-C₆) alkyl (meth)acrylates.

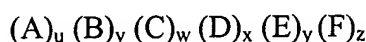
Claims 11-12 (canceled)

Claim 13 (original): The photopolymerization composition of claim 9, further comprising cross-linking agents, plasticizers, fillers, rheology agents, stripping agents, dyes, stabilizers, or mixtures thereof.

Claim 14 (currently amended): A method of imaging comprising:

a) providing a photopolymerizable composition comprising:

1) a compound having a formula:



where A is derived from one or more hydroxy substituted alkyl (meth)acrylates, B is derived from one or more hydroxy polyalkylene oxide (meth)acrylates, C is derived from one or more alkyl (meth)acrylates, D is derived from one or more (meth)acrylic acids, E is derived from one or more vinyl aromatic monomers, nitrogen containing compounds, silicon containing monomers, substituted ethylene monomers, or cyclic olefin monomers, or thio-analogs of a nitrogen containing compounds, and F is one or more poly opened-ring lactone polyalkylene oxide (meth)acrylates, where u, v, w, x, y and z are weight percentages of the monomers in the backbone, where u is 0 to 30%, v is 0 to 30%, w is 5 to 70%, x is 5 to 40%, y is 0 to 20% and z is 0 to 30% with the proviso that at least one of u, v or z is greater than 0, and at least one of A, B, C, D, E and F has at least one pendent functional group, the pendent functional group is derived from diisocyanates, triisocyanates, or polyisocyanates, and

2) one or more photoinitiators;

c) applying the photopolymerizable composition to a substrate;

d) imagewise exposing the photopolymerizable composition to actinic radiation to form a polymerized composition; and

- e) developing the imagewise exposed photopolymerized composition to form an image on the substrate.

Claim 15 (original): The method of claim 14, further comprising a step of etching away metal on the substrate exposed during developing.

Claim 16 (original): The method of claim 15, further comprising the step of stripping away the photopolymerized composition from the developed and etched board to form a printed circuit board.

Claim 17 (original): The method of claim 16, wherein the metal on the substrate comprises copper, copper alloy, nickel, gold, platinum, silver, tin, zinc, or palladium.

Claim 18 (new): The compound of claim 1, wherein the hydroxyalkyl (meth)acrylates are branched or unbranched hydroxy(C₂-C₆)alkyl (meth)acrylates.

Claim 19 (new): The photopolymerizable composition of claim 9, wherein the pendent functional group of the polymeric binder comprises one or more α,β -ethylenically or acetylenically unsaturated groups.

Claim 20 (new): The method of claim 14, wherein the pendent functional group of the compound comprises one or more α,β -ethylenically or acetylenically unsaturated groups.